

BARG Newsletter July 2025

***Ballarat Amateur Radio Group Inc. #6953T
July 2025 Monthly Newsletter***

**Next General Meeting BARG inc
11:00am, Saturday 26th July 2025
At the Airport - All Welcome**



Contacting us
BARG@BARG.ORG.AU

We're on the web.

www.barg.org.au

https://twitter.com/vk3_barg

<https://www.facebook.com/groups/VK3BML/>



President's Report July 2025	3
The Next BARG General Meeting	3
The BARG Annual General Meeting And General Meeting	3
Members please note;.....	4
GEORGE FOWLER AUCTION	4
VKFF Park during 2025 National Bird Week	4
Royal Flying Doctors Body Chart	5
"I was out activating five local parks/reserves."	7
Remembrance Day Contest 2025	9
X and Y Class Safety Capacitors – Explained.....	10
A Brief History of X and Y	12
What happened here?	12
Youth Net on the Link System.....	13
From The Barg Newsletter Archive	14
A Tragic Reminder: Safety Must Come First in the Field	15
WWFF August Activity Month August 2025.....	17
Magazine Reviews	18
QST Review July 2025	18
Silicon Chip Review July 2025	20
BARG Office Bearer Nomination Forms.....	21

Front Page Contributor Robert VK3ARM, POTA

Times and dates of nets as below

Club Nets: VHF NET: Every Tuesday Night at 8 pm on 146.750 MHz - VK3RBA

HF NET: Every Thursday Night at 8 pm on 3.608 MHz - VK3BML

6m NET: Every Tuesday Night at 8:30 pm on 53.650Mhz RX / 52.650Mhz TX - FM with a 91.5 tone - VK3RWU

LINKED REPEATERS: *The local VK3RBA-70cm repeater on Mt Buninyong is part of a network of linked repeaters covering North-Western Victoria.*

Access details for this repeater have recently changed.

For full details of this linked network and access details

see <https://www.grz.com/lookup/vk3rba>

You can listen to the system live <http://vk3rba.dyndns.org:441/>

This linked system may be accessed via IRLP node 9503



President's Report July 2025



So let us talk Hamvention this time, it will be on again next at a date to still be determined.

But there is a big but to this.

The subcommittee for Hamvention met recently and the question was raised to whether we continue Hamvention or not. After some discussion it was decided to continue pending commitment from members to help on the Saturday before and on the day as well.

We need approximately 12 Volunteers to sign up and we need this commitment prior to the 30th of October this year. The subcommittee is also looking into replacing the Hamvention with a car-boot style sale if it does not go ahead.

More on all of this at July's General meeting and an email will be sent out early in August so you all can indicate your involvement with Hamvention 2026.

Another thing is the AGM this is coming up in August, time for me to tell you all I will not be standing as President for another term. I need some time out of the role for the next 12 months or so.

Cheers, 73s
Ben VK3NRD

BARG inc. OFFICE BEARERS

President	Ben Daniel VK3NRD	Ordinary Member	Tom George VK3DMK
Vice President	Colin Consiglio VK3NCC	Ordinary Member	Ian Fairweather VK3YFD
Secretary	Peter Westgarth VK3APW	Ordinary Member	Doug Ellery VK3DRE
Treasurer	Chris Huggins VK3QY	Ordinary Member	David Martin VK3KQT
Ordinary Member	Craig Cook VK3KG	Ordinary Member	Mal White VK3OAK
Ordinary Member	Paul Black VK3TXR		

The Next BARG General Meeting

Saturday 26th of July 2025

11:00am

The BARG Annual General Meeting **And General Meeting**

Saturday 30th of August 2025 11:00am

Members please note;
Membership Fee of \$40.00
Falls due on the 1st July 2025
You must be a payed up member at the
time of the AGM to vote and be
nominated for club positions

GEORGE FOWLER AUCTION

The Ballarat Amateur Radio Group
Annual George Fowler Auction
will take place on
Sunday 14th September 2025.



VKFF Park during 2025 National Bird Week

A special certificate
(example opposite) will be issued
to any amateur radio operator
who activates a VKFF park during
2025 National Bird Week, 20th
October 2025-26th October 2025.

All applications via email to
the VKFF National Co-Ordinator
at vkffaustralia@gmail.com

More information on
National Bird Week can be found
at:

<https://www.wwffaustralia.com/2025-national-bird-week.html>



Royal Flying Doctors Body Chart

Contributor John VK3CFH

It's a Century since Alfred Traeger, VK5AX, began developing the pedal radio, 1923, and its placement as an icon of the Royal Flying Doctor Service by Rev John Flynn. This excerpt from "Traeger — The Pedal Radio Man" explains the simple method to convey the location of the many ills and pains experienced by the outback residents.

"Traeger thought it was a joke!"

The body chart became an ingenious symbol of pedal radio communication by flying doctors. "Where is the pain?"

It was a natural happening that the body chart should be coupled with the standard medical chest that the Flying Doctor leaders supplied to every outback wireless outpost.

This was a lockable steel box with a series of shelves that initially contained 95 neatly numbered medicines and drugs. The contents of the chest were regularly reviewed by the Flying Doctor, and in addition to medicines there were bandages, dressings, hypodermic syringes, a scalpel, scissors, a kidney dish and a catheter.

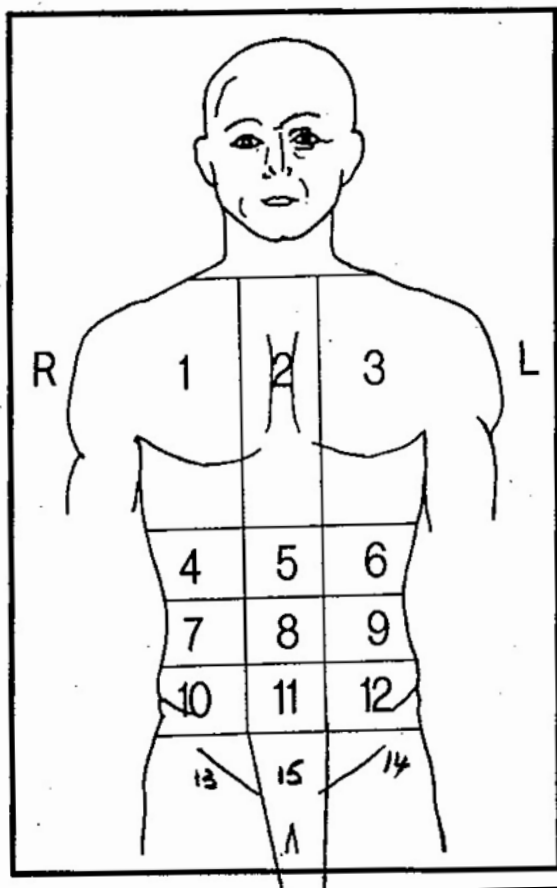
About 40 items were drugs marked 'Doctor's Orders Only'.

Flying Doctor Keith Sweetman of the Wyndham Base and Dr. George Simpson of the Victorian Flying Doctor Council were the instigators of the scheme, and by the 1960s there were 2000 medical chests and body charts in the widely scattered outback homes in the Traeger radio network.

Dr. George Simpson had also arranged for a medical chest and body chart to because it enabled him and his team of workers to know what was going on in the bush areas, and even to tune into the radio

base at Port Augusta and listen to their Special friend Graham Pitts and the Flying Doctor making reference to medical chests and body charts in their daily medical calls. The people 'out there' were always Traeger's absorbing concern, and he would laugh quizzically at the story of the Flying Doctor who prescribed to a reputable old bushman that he should take two pills from bottle number 9 in the medical chest. The bushman reported back at the-next radio session explaining that the number 9 bottle was empty but he had taken pills from number 7 and number 2 and was 'now feeling pretty good'.

These amusing stories about comical exchanges 'on the pedal' have become part of the folklore of the outback — rugged talkback yarns by drovers, the romance of the stockman trying to make love in Morse code, and vivid tales about women buying new things for the races.



Even the crazy story about the distressed lady describing to the Flying Doctor on the radio the physical symptoms of her sick duck, which was “having terrible trouble laying its first egg!”

An addendum from the Doc.

I have added areas 13, 14 and 15 as I did not think the chart numbers went low enough!

Areas 13 and 14, hernia sites (ruptures) in the groin; and lymph nodes (glands) might be inflamed from near or lower limb infection.

Area 15, “private” BUT! Swellings and pain is information to help a doctor diagnose any problems, male or female.



Photograph taken by Flynn of Traeger in 1928 demonstrating the first pedal radio,

He is operating a morse key



The medicine chests were packed with essential items. (Supplied: National Museum of Australia)

Cheers. John VK3CFH

<https://www.abc.net.au/news/2018-08-17/royal-flying-doctor-service-at-national-museum/10122320>

<https://www.samhs.org.au/Virtual%20Museum/hospital-andother-orgs/rfds-wireless/flying-doctor-radio.htm>

Boolarong press ISBN: 0 46349 1972 7, “Traeger the pedal radio man”.



"I was out activating five local parks/reserves."

Contributor... Robert VK3ARM



I activated five parks on Sunday 29th June that had never been activated. They were on the edge of or actually in Stawell and had never been operated from as POTA.

After obtaining advice at the June meeting from Mal VK3OAK, I was quite confident to use VK-Porta-Log on my Samsung Tablet. Logging was fine but it was after that where the rot set in.

I couldn't make head or tail of the file that I eventually located in the tablet. It certainly had all the logs in it however I wasn't confident that this was the one to send off to Peter (VK3ZPF). He administers the logs for VK3.

In the end I extracted info out, one log at a time and created five separate CSV (Comma Separated) files that I sent off.

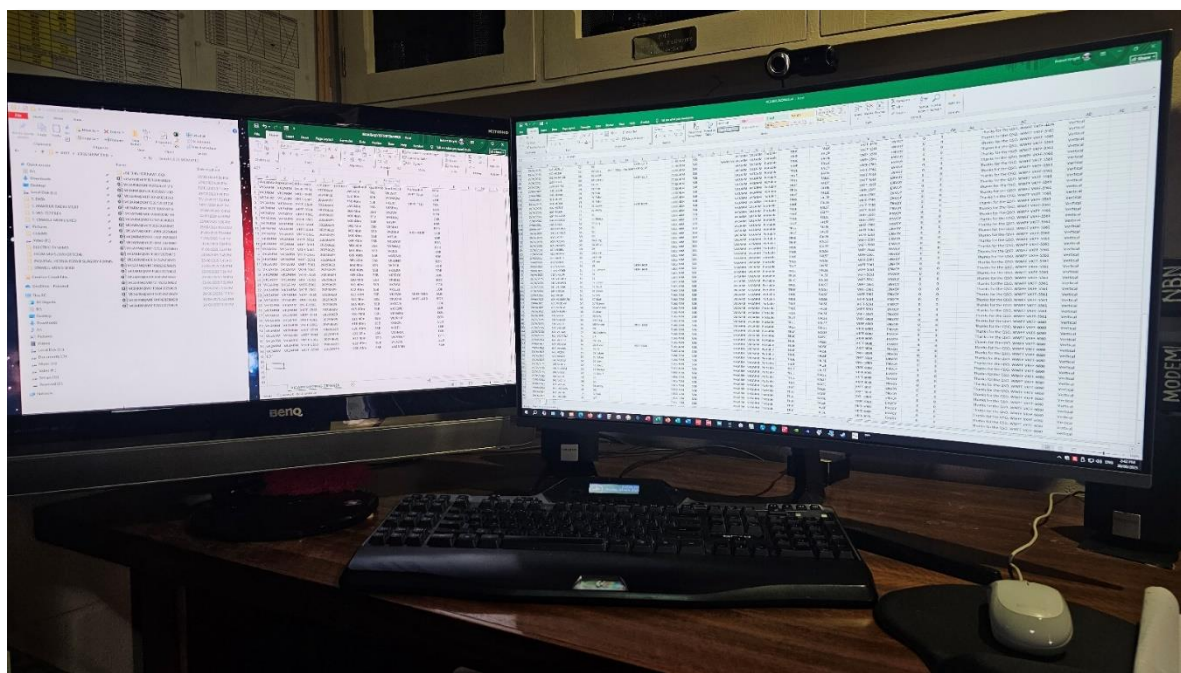
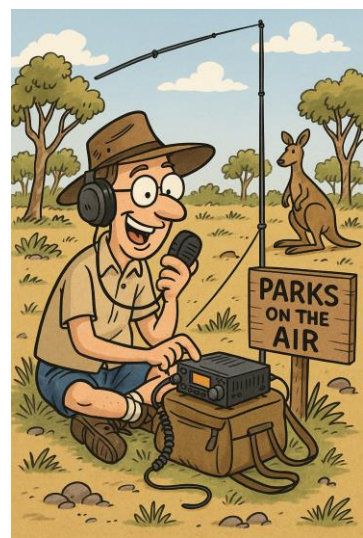
It might be Senior Fog with me but this was the only way I was confident enough to get the logs to Peter.

The day was quite enjoyable though, with reasonable temperatures (for winter anyway) and no rain.

I think I still have a ways to go to be an expert Activator however I was certainly happy with 171 contacts.

I've had a slow start to this part of my hobby however I'm getting more keen as this year gets longer.

The photo shows my two screens at home with what came out of the Tablet to the right and the creation of the fourth of what was five individual Park files in the left screen.





I made further contact with Peter (VK3ZPF) who pointed me to CX File Explorer APP on Play Store. Downloaded and installed it on my Tablet and VOILA!

It pointed me to VK Porta-Log. I opened that folder and there sat all five ADI files from my Sunday activations, staring at me and ready to be sent off. Amazing how simple it was in the end!

I activated five new Parks on weekend of 12th and 13th July, totalling 232 contacts on 40 and 20.

Saturday was quite pleasant but on Sunday I had constant rain while in Repper Bushland Reserve and occasional drizzle in Illawarra 10 Bushland Reserve.

I'm working my way through reserves that have never been activated.

The JPC-12 antenna has performed beautifully but my car became the portable shack because of the changing weather.

Was able to get it up (and down) between rain. Broke it in half and shoved it through the boot into the car so that I could get it up and down quickly.

My rain gear was put to good use.

I used my Codan Envoy, set to half power. Made it easier to move between parks.

I'm finding VK Porta-Log easier to use. It's a breeze to submit logs.

Oh the joys of modern technology.

Cheers, Robert VK3ARM

<https://parksontheair.com/index.html>

<https://vk3zpf.com/vk-port-a-log>



Remembrance Day Contest 2025

Next contest 16th & 17th August 2025
Contest Manager Alan Shannon VK4SN
vk4sn@wia.org.au

Rule changes in 2025:

1. The manager will provide awards for the top 3 Youth entries.

Contest Introduction

This contest commemorates the Amateurs who died during World War II and is designed to encourage friendly participation and help improve the operating skills of participants. It is held on the weekend closest to the 15th August, the date on which hostilities ceased in the southwest Pacific area.

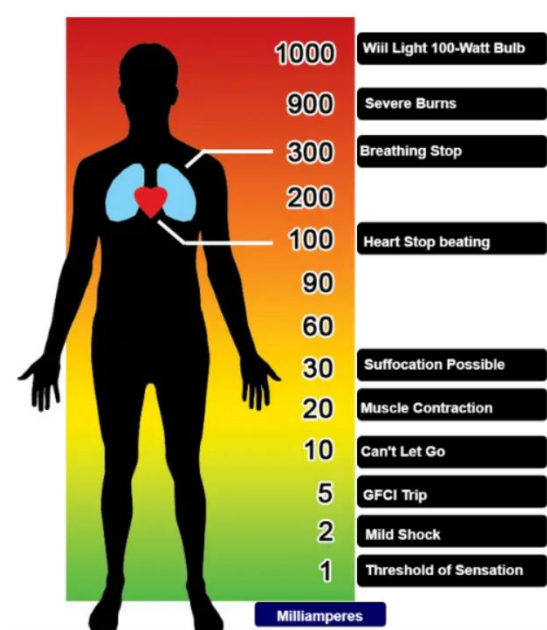
A perpetual trophy is awarded annually to the Australian state or territory with the best performance. The name of the winning State or Territory is inscribed on the trophy, and that State or Territory then holds the trophy for 12 months. The winning State or Territory is also given a certificate, as are leading entrants.



Aim Of The Contest

Amateurs will endeavour to contact amateurs in VK call areas, ZL and P29 on all bands except WARC bands. Modes allowed are PHONE, CW and RTTY as per the era remembered.

2025 Results. Released after contest.



Effect of Electric Current

S. No.	Intensity of Current	
		At this level, a person gets a painful electric shock and can lose muscular control. This range of current is called "freezing current" or "let-go current".
1.	0 – 1 mA	The person will feel a sensation of a mild tickle in the body part touching the electric wire.
2.	1 – 5 mA	For this current level, the person feels the sensation akin to pins and needles in the body part touching the wire.

X and Y Class Safety Capacitors – Explained

Contributor Tom VK3DMK

In the process of my job, repairing industrial and commercial electronics, I quite often come across these capacitors with X or Y designators.

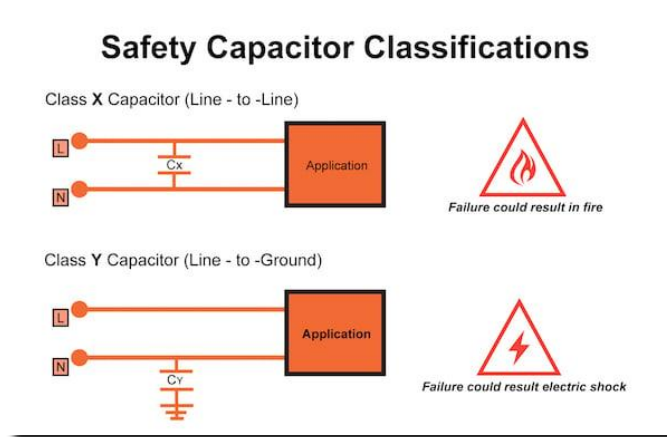
X and Y capacitors are specialized safety-rated components used in AC mains filtering. They help suppress EMI (electromagnetic interference) and prevent dangerous faults. With the increased implementation of switch mode power supplies and digital circuits, these capacitors have become essential for filtering EMI not just from the circuit it is connected to but also EMI already on the mains power supply.

Most amateur radio gear will have these capacitors and there is nothing to stop the homebrewer to do the same thing.

Here's a breakdown of what they are, their types, and how to use them.

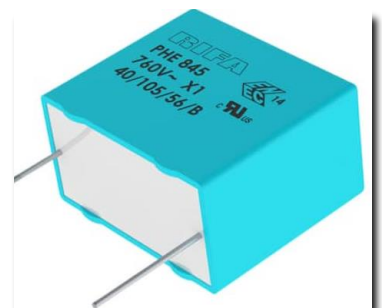
X vs. Y Capacitors

- X Capacitors: Used across the AC line (line-to-line).
- Y Capacitors: Used from line or neutral to earth (line-to-ground).



X Capacitor Types

Type	Test Voltage (AC)	Peak Surge Voltage	Typical Use
X1	$\geq 480\text{ V}$	Up to 4 kV	Industrial/higher energy environments
X2	$\geq 250\text{ V}$	Up to 2.5 kV	Most appliances, consumer gear
X3	$\geq 250\text{ V}$	Up to 1.2 kV	Light-duty filtering (rare)



Y Capacitor Types

Type	Max Operating Voltage	Peak Surge Voltage	Typical Use
Y1	250 V	Up to 8 kV	Double-insulated gear, Class II appliances
Y2	150 V	Up to 5 kV	Basic insulation, less critical
Y3	Varies	~2.5 kV	Obsolete/legacy use
Y4	150 V	~2.5 kV	Tiny/light-duty applications



Why Not Use Regular Capacitors?

Standard capacitors are not designed to fail safely. X and Y capacitors are self-healing, flame-retardant, and designed to avoid short circuits or dangerous leakage currents.

Visual Markings and Form Factors

These capacitors are usually boxed film (X types) or ceramic disc/MLCC (Y types). They are marked with ratings such as X2, Y1, and include safety approvals like UL, VDE, or ENEC.

Quick Summary Table

Marking	Application
X2	Across L-N (typical SMPS filter)
Y1 or Y2	Line/Neutral to Earth
XY Combo	Single body with dual safety roles (check datasheet)

How Many Types Exist?

In total, there are 7 commonly recognized types:

-X1,X2,X3-Y1,Y2,Y3,Y4

However, in real-world usage, X2, Y1, and Y2 are by far the most common.

Design Tips

- Never substitute generic ceramic or film caps for X/Y types.
- Always check the rated voltage and safety certification.
- Use IEC 60384-14 compliant parts for safety-critical mains filtering.
- For Class II appliances, combine X2 across L/N and Y2 from L/N to Earth.

<https://www.allaboutcircuits.com/technical-articles/safety-capacitor-class-x-and-class-y-capacitors/>

<https://www.vishay.com/docs/28536/geninfo-cd-rfi-safcaps.pdf>

Cheers, Tom VK3DMK

A Brief History of X and Y

X and Y capacitors are a cornerstone of safe AC power design, but their origins are rooted in the fiery, shocking days of early consumer electronics. Here's a quick history of how and why these safety-rated components came into being.

Back in the Day... (1950s–70s)

In the early days of AC-powered gear—radios, TVs, and home appliances—there were no safety-rated capacitors. Engineers would often use ordinary paper or ceramic caps straight across the mains, or from live line to chassis ground. These worked fine until they didn't: over time, they'd short, smoke, or explode, sometimes causing electric shock or house fires.

Cue the Fireworks

Wax-paper capacitors were especially notorious. Cheap and moisture-absorbing, they became dangerous with age. Under surge conditions (like lightning hits or power spikes), they'd short out, catch fire, or arc over, sometimes turning appliances into mini flame-throwers or death traps.

Enter the X and Y Safety Ratings (1980s–Today)

By the late 1970s, international safety bodies stepped in. New capacitor classes—X and Y—were defined for direct connection to the mains. X capacitors (line-to-line) had to withstand surges without igniting, while Y capacitors (line-to-earth) had to fail in a way that wouldn't shock the user.

Safety Standards That Emerged

These new safety-rated caps were governed by strict standards, including IEC 60384-14 and UL 60384. They had to pass destructive testing—high voltage pulses, humidity soak tests, and flammability checks. Genuine parts carry certification logos like UL, VDE, ENEC, or CSA to prove they meet the standard.

Modern Manufacturing

Today's X and Y capacitors are built to last. Most are metallized polypropylene film inside flame-retardant epoxy. They self-heal if arced and are batch-tested for consistent quality. Both through-hole and SMD versions exist for modern designs.

Cheers Tom, VK3DMK

What happened here?

Find out next edition of the newsletter.





Youth Net on the Link System

Contributor James VK3JFR

6/7/2025

VK4AHA, VK4MCW, VK3BKO,
VK3HJQ, VK3SRC, VK3WMF,
VK3HOR, VK3FTEC, VK3EWF
13/7/2025

VK3HJQ, VK4AHA, VK4MCW,
VK3HOR, VK3LWS/M, VK4IKZ,
VK1AAK



From The Barg Newsletter Archive

RESISTOR COMBINATIONS

IF your maths is as bad as mine then you will have asked this question more than once. "Why does the formula for parallel resistors give you the result of combining two known resistors when in most cases you know the final value you want but not the initial values.

Well try this little programme on your VZ200/300 or C64. It works on both but you will have to adjust line 10 for your computer and also to save mucking about the programme runs right through and then stops so you will have to re-run it each time.

```
10   CLS
20   PRINT"DESIRED VALUE"
25   INPUT R
30   READ X
40   IF X < R THEN GOTO 30
50   IF X/10 > R THEN GOTO 300
60   B = (X*R)/(X-R)
61   IF B > 9.9 GOTO 70
63   B = B*10
65   B = INT(B)
67   B = B/10
69   GOTO 80
70   B = INT(B)
75   IF B < 0.1 GOTO 30
80   PRINT TAB(6);X;TAB(20);B
90   DATA 0.1,0.12,0.15,0.18,0.22,0.27,0.33,0.39,0.47,
        0.56,0.68,0.82
100  DATA 1.0,1.2,1.5,1.8,2.2,2.7,3.3,3.9,4.7,5.6,6.8,
        8.2,10
110  DATA 12,15,18,22,27,33,39,47,56,68,82,100,120,
        150,180,220,270,330,390,470
120  DATA 560,680,820,1000,1200,1500,1800,2200,2700,
        3300,3900,4700,5600,6800
130  DATA 8200,10000,12000,15000,18000,22000,27000,
        33000,39000,47000,56000,68000
140  DATA 82000,100000,120000,150000,180000,220000,
        270000,330000,390000,470000
150  DATA 560000,680000,820000,1000000
200  GOTO 30
300  END
```

As a programme I have no doubts it can be both criticised and improved but I am too lazy to bother and as long as it gives me the value I want then I can get on with the hardware I am building.

73 de Reg VK3CAZ

CHEAP QUAD BRACKETS

The difficult problem of attaching the cross arms of a quad antenna to the boom can be overcome quite easily with this simple mount. It is essentially a 4 way, conduit junction box obtainable from McEwans for \$2.29. It is made from PVC plastic, and the only modification necessary is to drill a hole for the boom. The diameter of the outlets is 20 mm, designed for a perfect fit with readily available conduit or wooden dowel. It will be necessary to glue (or screw) the cross arms in position to prevent slipping in strong winds. These brackets allow a quad antenna to be constructed much more easily than would otherwise be possible and results in a lightweight, "pleasing to the eye", antenna. They can also be used for a ground-plane antenna to accurately position the radials.

73: Steve VK3MRA

A Tragic Reminder: Safety Must Come First in the Field

https://qrper.com/2025/07/a-tragic-reminder-safety-must-come-first-in-the-field/?utm_source=amateur-radio-weekly&utm_medium=email&utm_campaign=newsletter



July 5, 2025 Thomas Witherspoon 22 Comments

It's with a heavy heart that I share news of a tragic accident that took the life of fellow ham radio operator and POTA enthusiast, Tripp Owens (N4NTO).

[According to CBS 17](#) and [WRAL](#),

Tripp died after being electrocuted at a cemetery in Harnett County, North Carolina—most likely at [Averasboro Battlefield Historic Site \(US-11375\)](#).

Reports indicate that his vertical antenna came into contact with overhead power lines. News of the incident was shared within the community by Dave (W4JL), via a message passed along by Perry (N5JP).

It appears the incident may not have occurred during setup, but rather while taking the antenna down, as Dave noted that Tripp had signalled he was QRT on the POTA spots page. Based on Reverse Beacon Network activity, Tripp was on the air at least between 12:02 and 12:13 UTC yesterday morning.

This is heartbreaking news for those of us in the Parks on the Air and WWFF communities. Tripp was a well-known and well-loved North Carolina POTA operator—a dedicated hunter and activator whose callsign appears in my logs many times over the years. He'll be deeply missed.

Prioritizing Safety

You've probably heard me mention this in past [activation videos](#) and [field reports](#): scanning for power lines should become second nature—just like looking for trees to hang antennas. This tragedy is a powerful reminder of why that habit matters.

When public parks and recreation areas were designed, they were never meant for conductive vertical antennas or wire antennas strung through trees. Power lines across park properties follow their own logic—typically routed for infrastructure needs like lighting, water

facilities, or visitor centres. Our antennas and setups are the unknown factor in those environments.

This is why you should always carefully survey your surroundings before setting up:

Before You Deploy an Antenna:



- **Scan the area for power lines.**
- **Trace their path**—power lines often lead to buildings, pavilions, or utility poles deeper in the park.
- **Think beyond your setup moment.** Could a gust of wind, a falling limb, or an unstable mast cause your antenna to swing or fall into a live wire?
- **Never assume a wire is insulated or safe.** Even low-hanging lines can be deadly.

In some parks, overhead lines are surprisingly well hidden in the canopy or not immediately visible from popular operating areas. Take your time. Walk your operating site. Think it through before deploying a mast or tossing a wire into a tree.

72, Thomas (K4SWL)

I told the nurse I was bitten by a wolf.

“Where?” she asked.

“No. Regular”

Starting a new job at the guillotine factory.

I'll beheading there tomorrow.

Should be a sharp career move, but I'll try not to lose my head over it

I told my wife that a husband is like a fine wine, we just get better with age.

The next day she locked me in the cellar.

WWFF August Activity Month August 2025



Posted by [Luk ON4BB](#) in [News](#)

WWFF Team would like to invite all WWFF Activators and Hunters to participate in

“The WWFF August Activity Month”.

- The activity event will start at **00:00 UTC on August 1st and finish at 23:59 UTC on August 31st.**
- WWFF Activators are invited to be active from WWFF areas as much as possible.
- A big opportunity for our hunters to work new WWFF areas and increase their score.
- We recommend all Activators to use the WWFF Agenda and the WWFF Facebook Group to inform the WWFF Hunter community of their plans.
- After each activity the Activators have to send in their logs to the log manager responsible for the areas they activated.
- The deadline for sending in logs to count towards this special event is September 21st.
- To facilitate the special award processing we ask the activators – especially when using vanity /special event calls or group calls – to make sure the operator field in their logs is populated with their home callsign.
- The log uploaders then have until September 21st to check and upload the logs. By September 30th we will start generating the awards and rank lists based on the available data in WWFF LogSearch.



Participation Awards

On September 30th WWFF will publish awards for Activators and Hunters.

ACTIVATOR PARTICIPATION AWARD

For activating WWFF references during “**The WWFF August Activity Month**” **Activators** should accumulate at least 220 QSOs. An extra award is available when an activator makes 1000+ QSOs from valid WWFF reference(s).

Awards sample from 2024 below



Magazine Reviews

QST Review July 2025

- P9 Second Century. Looks at emergency services in the US and how the amateur service contributes.
- P13 Member Spotlight. Rex Vokey, KE6MT
- P20 Up Front. Stealth Antenna, Stepping Up, Birdies
- P34 Operating WSPR QRPpp: Conrad Trautmann, N2YCH. It's All About the Noise. Quieting your local interference helps with receiving the weakest signals.
- P37 The Power Connector Adapter Hub. Donald "Don" Whiteside, WA8QMV. When you want to attach a device to a power source, the connectors are often incompatible; WA8QMV has a solution.
- P40 Product Review. Pascal Villeneuve, VA2PV Xiegu X6200 HF and 6-Meter QRP Transceiver. 160M to 6M.
- P46 Product Review. Ham2K Portable Logger. Reviewed by John Leonardelli, VE3IPS
- P48 Lynovation CTR2-MIDI. Reviewed by Pascal Villeneuve, VA2PV. a small MIDI controller that can be used in combination with CAT software.
- P52 Ask Dave. Equipment Maintenance, Dave Casler, KEØOG. Emergency Phrases, and Tuning
- P54 Supporting the Lone Rock Fire Response. Stephen Saltzman, AE7NW. ICS and ARES training merged in the fight against a massive Oregon wildfire. The Lone Rock fire began on July 13, 2024, in northcentral Oregon. Within weeks, it grew to consume almost 140,000 acres — equal to almost 10 times the size of Manhattan.
- P56 An Emergency Operations. Gordon Mooneyhan, W4EGM. Center Station Alternative Amateur radio speeds up severe weather alerts with help from commercial television.
- P58 2024 SET Success. Michael Prasad, KC2UOA. New Jersey ARES is better equipped for surprise crises, thanks to this trial run.
- P61 A Case for Standardizing EmComm Training. John Minard, W5JXN, and J. M. Rowe, N5XFW. Hams can unify and hone their emergency response with the PACE model, in addition to ICS and AUXCOMM training.
- P64 ARES Celebrates 90 Years of Service. Scott Yonally, N8SY, A legacy of resilient communication. For 90 years, the Amateur Radio Emergency Service® (ARES®), a program of ARRL, has stood as a pillar of support, providing crucial communication assistance during disasters and emergencies. This milestone anniversary marks 9 decades of selfless service, unwavering dedication, and a commitment to keeping communities connected when conventional communication channels falter.



P66 Simulated Emergency Test 2024 Results. ARRL Field Organization Supervisor Steve Ewald, WV1X. The 2024 ARRL Simulated Emergency Test (SET) gave amateur radio operators a great opportunity to put their training, plans of action, and working relationships with community organizations and government agencies to the test under simulated emergency conditions and scenarios. The results of the SET represent their efforts to be ready to respond when called upon.



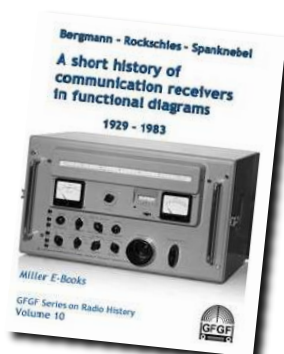
P69 Happenings. Sierra Harrop, W5DX. ARRL Files Comments Responding to FCC Request for Input. ARRL filed comments with the FCC in response to its request for public input on alleviating unnecessary regulatory burdens.

P73 Public Service. Rick Palm, K1CE. The ATV and ARES Connection in Boulder, Colorado. In 1976, a massive downpour flooded the Big Thompson Canyon in Colorado, with more than 150 fatalities recorded. Agency staff had very few radios, so hams provided emergency communications on an ad hoc basis. In the aftermath, the Boulder County Sheriff's Office Civil Section called on the three ham clubs in the area to organize the Boulder County Amateur Radio Emergency Services® (BCARES) as a joint ARES®/Radio Amateur Civil Emergency Service (RACES) program. There was an amateur radio television (ATV) repeater in operation by the end of the 1970s, but RFI from an FM broadcast station at the repeater site resulted in dormancy during the '80s.



P75 Exam Info. Maria Somma, AB1FM. ARRL VE Teams — Go Digital in 2025!

P83 New Books. Reviewed by Edward Durrant, DD5LP. A Short History of Communication Receivers in Functional Diagrams: 1929 – 1983.



P85 The 2025 ARRL 222 MHz and Up Distance Contest. 1800 UTC Saturday, August 2 – 1759 UTC Sunday, August 3, 2025.

P86 August 2025 ARRL Rookie Roundup — RTTY 1800 UTC – 2359 UTC, Sunday, August 17, 2025.

P87 Club Station. Mike Walters, W8ZY. An Antenna-Building Party for New Hams. Many clubs find that it can be difficult to retain newly licensed members who don't know where to start, or who might be nervous getting on the air, among other reasons. In this month's column, Garland Amateur Radio Club (GARC), K5QHD, member Randy Brack, N5MRB, shares how the Texas club has found success remedying these concerns by hosting antenna parties.



P89 Ham Media Playlist. Steve Goodgame, K5ATA. HamJazz.

P91 How's DX? Bernie McClenny, W3UR. July is IOTA Month.

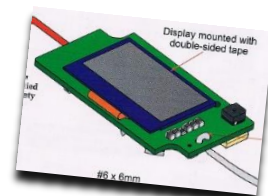
P93 The World Above 50 MHz. Jon Jones, NØJK. Antarctica, Various DXpeditions, and Remote Stations on 6 Meters.

- P98 Classic Radio. Scott Freeberg, WA9WFA. Ted Crosby's, W6TC, QST Ham Band Receiver Series. From 1957 through 1965, Ted Crosby, W6TC (SK), wrote a series of articles in QST about ham radio receivers that could be "built by the average ham with an average ability." During that era, hams would often homebrew their own transmitters and receivers, as parts were widely available and inexpensive, and a ham could save a lot of money by building a radio themselves.

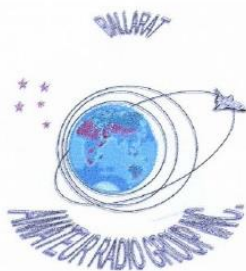


Silicon Chip Review July 2025

- P2 Editorial Viewpoint. Nicholas Vinen. Lithium Batteries.
- P14 SPACEX. David VK3DSM. An informative history of the SPACEX concept and the carrying out of that idea. From the first attempts at landing a first booster to the launches of Starship and its development.
- P26 USB Solar Charging System. Julian Edgar. Using readily available modular parts, you can get a simple yet efficient DIY to keep your battery system alive and well.
- P33 Smart Probe. Andrew Levido. A device to measure voltage and make continuity tests. Not a DMM, but a basic bit of test gear to do preliminary circuit testing. Using a 128 x 64 pixel display.
- P46 Precision Electronics. Part 9. Andrew Levido. Looks at designing systems and the input and output considerations, calibration and ADC.
- P54 Salvaging Parts. Julian Edgar. A look at the reusable electronic bits and pieces you can find in photocopiers, coffee machines, washing machines, power drills and even old amplifiers.
- P62 Hot Water System Solar Diverter. Part 2. Ray Berkelmans & John Clark. Continues with mechanical construction and setting it up in a hot water system.
- P70 Using Electronic Modules. Tim Blythman. 8x15 LED Matrix. An explanation on how this module works and how to connect to your UNO or Pico.
- P74 SSB Shortwave Receiver. Part 2. Charles VK3BAR. Shows the control and rf board layouts, winding the toroids, programming the Nano, aligning and calibration.
- P80 Circuit Notebook. GPS Speedometer and Logic Level Indicator.
- P82 Serviceman's Log. Water woes, Beyonwiz video recorder. Water pump, Bose Sound Dock.
- P88 Vintage Radio. Ian Batty. Eddystone EC10 Mk2 All Transistor Shortwave Radio. 1973 vintage shortwave radio, built in England and showing schematic and checking the mains power adapter.



BARG Office Bearer Nomination Forms



B.A.R.G. Inc. NOMINATION FORM

Ballarat Amateur Radio Group—Inc # 6953T

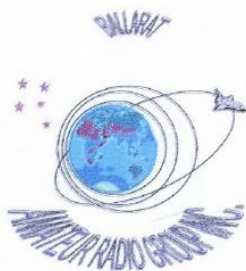
DATE: _____

I wish to Nominate _____ CALL: _____

For the position of _____ of BARG Inc.

Nominated by: _____ and _____

Nomination accepted by: (Nominee) _____



B.A.R.G. Inc. NOMINATION FORM

Ballarat Amateur Radio Group—Inc # 6953T

DATE: _____

I wish to Nominate _____ CALL: _____

For the position of _____ of BARG Inc.

Nominated by: _____ and _____

Nomination accepted by: (Nominee) _____



Ballarat Amateur Radio Group Inc
Registration Number A0006953T
ABN 44 247 200 143
Application for Club Membership

This completed document should be emailed to the Secretary at BARG@BARG.ORG.AU, or brought along to a face to face meeting.

Surname: _____ Given Names: _____

Callsign: _____

Are you a financial member of WIA?: Yes No

Partner's Name: _____

Residential Address: _____

Postcode: _____

PostalAddress: _____
(If different to above) Postcode: _____

Telephone;
(Work) _____ (Home) _____ (Mobile) _____

EmailAddress _____

Unless otherwise requested, Newsletters and Club information will be sent to your email address.
If the Club decides to publish a Club Directory, are you willing to have the above information included? Please indicate: **Yes No**

By applying for membership I indicate my support of the purposes of the Association and agree to comply with the Association rules in effect.

Applicant's Signature: _____ Date: _____

Proposed By: _____ Callsign: _____ Date: _____

Seconded By: _____ Callsign: _____ Date: _____

--ooOoo--

Presented to Committee: _____ Decision: Accept / Reject

Fee Paid: \$ _____ Date: _____ Receipt No(if applicable:) _____

Entered into Membership Register: _____ Secretary: _____